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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LAYE, JADE O

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/819,163

Applicant(s)

OVADIA, SHLOMO

Examiner

Jade O. Laye

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-12, 14, 15, 17-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12, 14, 15, 17-20 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

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### *Response to Arguments/Amendments*

1. Applicant's arguments with respect to claims 1, 11, and 19 have been considered but are moot in view of the new ground(s) of rejection. Accordingly, **THIS ACTION IS MADE FINAL.**

2. Based upon Applicant's amendment of claims 1, 11, and 19, the Double Patenting Rejections applied in the previous non-final action have been withdrawn.

3. Based upon Applicant's submission of corrected drawing sheets, the objection applied in the previous non-final action has been withdrawn.

### *Claim Rejections - 35 USC § 102*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 2, 4, 6-12, 14, 15, 17-20, 22, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Roeck et al. (US Pat. No. 6,574,796).

As to claim 1, Roeck discloses a data carrier detection system utilized in cable networks. More specifically, Roeck's systems tunes to a channel within the broadband cable signal in order to receive modem operating parameters (i.e., initial maintenance request messages contained

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within A data channel), wherein the cable broadband system is associated with a first modulation technique (for example, QPSK). The system is then able to reconfigure itself to detect, and subsequently demodulate, another modulation technique (such as QAM) which is utilized by the data channel. (Abstract; Col. 5, Ln. 40-63; Col. 6, Ln. 42-62; Col. 7, Ln. 25-41; Col. 9, Ln. 42-Col. 11, Ln. 51). Once the data channel has been located, it is inherent said data channel be demodulated in order to receive the initial maintenance parameters (i.e., operating parameters), which will be used to update the operating characteristics of the cable modem. Accordingly, Roeck et al anticipate each and every limitation of claim 1.

Claims 10, 11, 18, and 19 correspond to the method claim 1. Thus, each is analyzed and rejected as previously discussed.

As to claim 2, Roeck's data channel is a "narrow band" channel within the broadband cable signal. Accordingly, Roeck et al anticipate each and every limitation of claim 2.

As to claim 4, Roeck further teaches accessing a list of channels within the system (inherent they be stored), selecting a channel (i.e., frequency) from the list, and demodulating the channel to recover system information (as discussed under the rejection of claim 1). Col. 4, Ln. 52-66 & Col. 9, Ln. 42-63). Accordingly, Roeck et al anticipate each and every limitation of claim 4.

Claims 12 and 20 correspond to the method claim 4. Therefore, each is analyzed and rejected as previously discussed.

As to claim 6, Roeck further teaches the method includes an indication of a data channel. (cited portions used to reject claim 1). Accordingly, Roeck et al anticipate each and every limitation of claim 6.

As to claim 7, Roeck further teaches the system will continue scanning channels until the data channel (which contains updating characteristics, etc.) is located. (Col. 10, Ln. 66-Col. 11, Ln. 22). Accordingly, Roeck et al anticipate each and every limitation of claim 7.

Claims 14 and 22 correspond to the method claim 7. Thus, each is analyzed and rejected as previously discussed.

As to claim 8, Roeck further discloses the system can first scan the most recently used channel. (Col. 9, Ln. 42-64). Since the system can contain a list in which each channel contained in said list is scanned in turn, it is inherent the most recently used channel would be first in the list. If not, the system would not scan the most recently used channel first. Accordingly, Roeck et al anticipate each and every limitation of claim 8.

Claim 15 corresponds to the method claim 8. Thus, it is analyzed and rejected as previously discussed.

As to claim 9, it is inherent the system of Roeck restore the demodulating parameters once the data channel has been ascertained because the broadband signal and data channels are modulated using different techniques. Accordingly, Roeck et al anticipate each and every limitation of claim 9.

Claims 17 and 24 correspond to the method claim 9. Thus, each is analyzed and rejected as previously discussed.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roeck et al in view of Shahar et al. (US Pat. Pub. No. 2003/0002495).

Claim 3 recites the method of claim 1, wherein the channel is a pilot channel. As discussed above, Roeck et al anticipate each and every limitation of claim 1, but fail to recite the limitation of claim 3. However, within the same field of endeavor, Shahar discloses a similar system wherein a cable modem locates a data channel via the use of a pilot signal. (Pars. [0048-0053]).

Shahar goes on to disclose a strong motivation to combine. In Paragraphs 0048-0052, Shahar teaches the use of pilot signals result in a faster channel acquisition, robust channel tracking, and allows the system to acquire locks on data channels without the need to demodulate. (Pars. [0048-0052]). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of Roeck and Shahar in order to create a channel detector utilizing a pilot tone within a data-over-cable system, thereby providing a faster and more efficient cable modem.

*[NOTE: The use of pilot signals to locate data channels is well known in the art of telecommunications. (As evidenced by Hughes, US Pat. No. 6,122,334 and Yamamoto, US Pat. No. 6,483,829)].*

***Conclusion***


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Initials   
June 9, 2005.

  
NGOC-YEN VU  
PRIMARY EXAMINER